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| 09/483,399 | 01/14/2000 | Michael L. Trompower | TELNP200US | 8324 |
| | 7590 04/03/200 CY & CALVIN, LLP | EXAMINER | | |
| 1900 EAST 9TH STREET, NATIONAL CITY CENTER 24TH FLOOR, CLEVELAND, OH 44114 | | | MEHRPOUR, NAGHMEH | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | Application No. | Applicant(s) | |
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| • | 09/483,399 | TROMPOWER, MICHAEL L. | |
| Office Action Summary | Examiner | Art Unit | |
| | Naghmeh Mehrpour | 2617 | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period was railure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from 1. cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). | |
| Status | | • | |
| Responsive to communication(s) filed on <u>01 Mar</u> This action is FINAL . 2b)⊠ This Since this application is in condition for allowant closed in accordance with the practice under E | action is non-final. | | |
| Disposition of Claims | | | |
| 4) Claim(s) 2-18,20-32,34 and 35 is/are pending in 4a) Of the above claim(s) is/are withdraw 5) Claim(s) 20-31 is/are allowed. 6) Claim(s) 2,3,7-18 and 32 is/are rejected. 7) Claim(s) 4-6,34 and 35 is/are objected to. 8) Claim(s) are subject to restriction and/or Application Papers 9) The specification is objected to by the Examined 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the or Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Examined Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Examined Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Examined Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Examined Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Examined Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Examined Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Examined Replacement drawing sheet(s) including the correction 11 The oath or declaration is objected to by the Examined Replacement drawing sheet(s) including the correction 11 The oath or declaration is objected to by the Examined Replacement drawing sheet(s) including the correction 11 The oath or declaration is objected to by the Examined Replacement drawing sheet(s) including the correction 11 The oath or declaration is objected to by the Examined Replacement drawing sheet(s) including the correction 11 The oath or declaration is objected to by the Examined Replacement drawing sheet(s) including the correction 11 The oath or declaration is objected to by the Examined Replacement drawing sheet(s) including the correction 11 The oath or declaration 12 The oath or declara | vn from consideration. r election requirement. r. epted or b) □ objected to by the forwing(s) be held in abeyance. Section is required if the drawing(s) is objected to by the forwing(s) is objec | e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d). | |
| Priority under 35 U.S.C. § 119 | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of | s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)). | on No ed in this National Stage | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | ite | |

DETAILED ACTION

1. In view of the Appeal Brief filed on 05/01/06, PROSECUTION IS HEREBY REOPENED. set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by

signing below:

CHARLES N. APPIAH SUPERVISORY PATENT EXAMINER

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 2-3, 7-8, 18, are rejected under 35 U.S.C. 102(e) as being anticipated by Paatelma (US Patent 6,463,042).

Regarding Claim 2, Paatelma teaches a cellular communication unit comprising:

a transmitter adapted to transmit data over an RF link (col 3 lines 60-65); and
a power control module 18 coupled to the transmitter 14 (see figure 4), the
power control module 18 adapted to receive a data packet having a first portion
(header, col 5 lines 2-18) and a second portion (data portion) and transmit the first
portion at a first transmission power and the second portion at a second transmission
power. (Transmission of header portion at normal power, and remainder of the slot at
reduced power relative to the header portion see col 4 lines 60-67, col 5 lines 1-5).

Regarding **Claim 3**, Paatelma teaches a method wherein the first power and the second power are adjusted so that the first portion and the second portion are selected so that the first portion and the second potion have a similar transmission ranges (col 2 lines 51-54).

Regarding Claim 7, Paatelma teaches wherein the communication unit is an access point (col 4 lines 51-57). Paatelma teaches that the mobile station 10 need not to be mobile at all, but could be installed or used at a fixed station. The mobile can be capable of operating with one or more air interface standards, modulation types, and access types (see figure 4, col 4 lines 51-57).

Regarding Claim 8, Paatelma teaches that the communication unit is a mobile unit (col 4 lines 8-15).

Regarding Claim 18, Paatelma inherently teaches a unit wherein the communication unit is coupled to a network (col 3 lines 60-66) and the network provides the power control circuit 18 (see figure 4, col 5 lines 2-18) with information relating to the power transmission level of the first portion and the second portion (col 2 lines 34-54).

Claim Rejections - 35 USC ∋ 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 9-17, 32, are rejected under 35 U.S.C. 103(a) as being unpatentable over Paatelma (US Patent 6,463,042) in view of Fisher et al.(US Patent Number 5,768,695).

Regarding Claim 9, Paatelma teaches a communicating system wherein the power control module receives the power data packet and dynamically controls the transmission power of the first portion and the second portions. Paatelma fails to teach the power control module includes power amplifier. However Fisher teaches a

system/unit wherein the power control module includes a transmission power amplifier (col 3 lines 32-39). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Fisher with Paatelma, in order to provide a highly desirable system wherein a resource allocation independent from the network architecture and the associated transmission and processing delays.

Regarding Claim 10, Paatelma teaches a unit wherein the power control module 18 includes: a D/A converter that receives power data information in digital format and converts the power data information to an analog control signal (col 4 lines 20-29), the analog signal adapted to control, a transmission power module adapted to receive the data packet, control the transmission power (col 4 lines 23-29). However Paatelma fails to teach that the power control module includes a power amplifier. However Fisher teaches the power control module includes a power amplifier (col 3 lines 34-39). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Fisher with Paatelma, in order to provide a system that has a better performance with high signal qualities.

Regarding Claim 11, Paatelma teaches a unit including a processor coupled to the D/A converter; processor transmits the power data information to the D/A converter (col 4 lines 22-29).

Regarding **Claim 12**, Paatelma teaches a unit 10 wherein including a receiver 16 coupled to the controller 18, the controller 18 includes processor, and the processor transmits the power data information to the D/A converter (col 4 lines 22-26).

Regarding Claim 13, Paatelma inherently teaches a unit wherein a receiver 16 coupled to controller 18 the controller 18 includes processor (col 4 lines 22-27), the receiver provides adapted to receive a transmission from the other communication unit transmitting information to receiver 14, the processor evaluating a range from the transmission and downloading power data information to the power control circuit based on a desired transmission range of the data packet (col 2 lines 36-54). In a cellular communication system, when communication between base station and mobile established that the transmitter from BTS receive a signal from the Mobile, or vise versa. In order for the link between the transmitter and the receiver to be established, and the system operates, the power control should be based on the desired transmission range. The desired transmission range is the distance between the transmitter and receiver, therefore, if the transmitted signal does not reach the receiver the communication will not be established. Therefore, Paatelma inherently teaches the processor evaluating a range from the transmission and downloading power data information to the power control circuit based on a desired transmission range of the data packet, in order for the data packet to be received.

Regarding Claim 14, Paatelma teaches a unit wherein the power control module 18 includes a digital processor device, a microprocessor device, and various analogs to digital A/D converters, digital to analog D/A converters (col 4 lines 20-26). Paatelma fails to teach a unit wherein the processor coupled to the power data register stores the power data information. However Fischer teaches a unit wherein the controller (processor) is coupled to a data registers stores section (see figure 3, col 4 lines 27-35). Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made, to combine the above teaching of Fischer with Paatelma, in order to provide a highly desirable system wherein a resource allocation is independent from the network architecture and the associated transmission and processing delays.

Regarding Claim 15, Paatelma fails to teach a unit wherein a processor is coupled to the power data register section; the processor transmits the power data information to the power data register section. However Fischer teaches that the power control module is coupled to a data register section module stores the power data information (col 4 lines 27-33). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Fischer with Paatelma, in order to provide a system that has a better performance with high signal qualities.

Regarding Claim 16, Paatelma teaches a receiver coupled to the processor, the receiver receives a transmission from other communication unit (col 4 lines 53-65).

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Regarding Claim 17, Paatelma inherently teaches a cellular communication unit including transmission power information to the processor (controller 18) from transmission communication unit 14 transmitting information to the receiver 16 receives (see figure 4, col 4 lines 22-26), the processor (controller 18) evaluating a range from the transmission power Information and downloading power data information to the power control circuit based on a desired transmission range of the data packet (See figure 4, col 2 lines 34-41, col 4 lines 22-67, col 5 lines). In a cellular communication system, when communication between base station and mobile established that the transmitter from BTS receive a signal from the Mobile, or vise versa. In order for the link between the transmitter and the receiver to be established, and the system operates. the power control should be based on the desired transmission range. The desired transmission range is the distance between the transmitter and receiver, therefore, if the transmitted signal does not reach the receiver the communication will not be established. Therefore, Paatelma inherently teaches the processor evaluating a range from the transmission and downloading power data information to the power control circuit based on a desired transmission range of the data packet (col 2 lines 36-54), in order for the data packet to be received.

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Regarding Claim 32, Paatelma teaches a cellular system (col 3 lines 60-67, col 4 lines 1-6), the unit comprising:

means for transmitting a data packet having a first portion (header col 5 lines 2-18) and a second portion (col 2 lines 34-54);

means for dynamically adjusting the transmission power level of the first portion (header) with respect to the second portion (the remainder of the data) of the data packet coupled to the means for transmitting a data packet having a first portion and a second portion (col 5 lines 2-18); and

means for determining the transmission power levels of the first and second portion based on a desired transmission range for both the first and second portion (col 2 lines 32-41). In a cellular communication system, when communication between base station and mobile established that the transmitter from BTS receive a signal from the Mobile, or vise versa. In order for the link between the transmitter and the receiver to be established, and the system operates, the power control should be based on the desired transmission range. The desired transmission range is the distance between the transmitter and receiver, therefore, if the transmitted signal does not reach the receiver the communication will not be established. Therefore, Paatelma inherently teaches the processor evaluating a range from the transmission and downloading power data information to the power control circuit based on a desired transmission range of the data packet (col 2 lines 36-54), in order for the data packet to be received.

Allowable Subject Matter

4. Claims 4-6, 34-35, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 20-31, are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding **claim 20**, the present application teaches a method of transmitting a data packet in a cellular communication system wherein transmitting a first portion of the data packet at a first transmission power level, a second portion at a second power level, and the third portion at a third power level as specifically mentioned in claim 20.

Regarding **claim 29**, the present application teaches an accesspoint system in a cellular communication system utilizing an IEEE 802.11 standard protocol wherein the power control module receives a data packet having PLCP permeable and PLCP header portion and a data portion and dynamically adjusts the transmission power of the packet during transmission of the packet, such that PLCP preamble portion begins transmitting at a first transmission power level and the data portion begins transmitting at a second transmission power level, the dynamic adjustment of transmission power made to facilitate the PLCP preamble and the data portion over a substantially similar transmission range as specifically mentioned on claim 29.

The closest prior art to the present application such as Paatelma et al. (US Publication 2004/0218570) teaches a variable rate transmission system for transmitting variable rate data including an accompanying signal indicative of the header portion folled by a dataportion. The system is arranged to transmit a downlink slot so that the Header

portion is transmitted at a higher power level than the data portion when the data portion does not contain valid data so as to reduce system interference. Paatelma fails to teach an accesspoint system in a cellular communication system utilizing an IEEE 802.11 standard protocol wherein the power control module receives a data packet having PLCP permeable and PLCP header portion and a data portion and dynamically adjusts the transmission power of the packet during transmission of the packet, such that PLCP preamble portion begins transmitting at a first transmission power level and the data portion begins transmitting at a second transmission power level, the dynamic adjustment of transmission power made to facilitate the PLCP preamble and the data portion over a substantially similar transmission range as specifically mentioned on claim 29.

Response to Arguments

6. Applicant's arguments with respect to claims 2-18, 32, 34, have been considered but are most in view of the new ground(s) of rejection.

Conclusion

7. Any responses to this action should be mailed to:

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naghmeh Mehrpour whose telephone number is 571-272-7913. The examiner can normally be reached on 8:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah be reached (571) 272-7904.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NM

March 27, 2007

MAGHARIA MANUEL